

Indianapolis Proximity Hearing 10/29/15

We would like to thank MSHA for allowing Peabody to comment on the Proposed Rule for Proximity Detection Systems for Mobile Machines in Underground Mines. I am Chuck Burggraf, VP of Safety for Peabody Americas Business Unit. Accompanying me are Chad Barras, Director of Safety and Compliance for Peabody Americas Business Unit, Jeremy Baker, Manager of Maintenance for Wildcat Hills Underground Mine near Equality, Illinois and Calvin Melvin, Maintenance Supervisor at Wildcat Hills.

Safety Contact

I will give you a brief outline of Peabody Americas journey of working with vendors to develop a reliable proximity system. Then more detailed experience will be provided by Calvin, Jeremy and Chad. This is an ongoing project and it is not complete at this time.

A Peabody team visited Sasol Mine in South Africa on November 16, 2010, to observe proximity detection in use on a continuous miner. We thought this technology had promise to protect miners so we commenced a project to determine if we could apply this to our operations.

In December of 2010 until the Spring of 2011, we tested the STRATA(Frederick Mining Controls) system at Willow Lake Mine in Southeastern Illinois in a building on the surface. The system was installed on a continuous miner and a battery coal hauler. Continual improvements and adjustments were made.

In the second quarter of 2011 the decision was made to set up a test at our Gateway Underground Mine in Southwestern Illinois. We continued to work on issues into 2013 trying to perfect the STRATA system. We also started to install Matrix Gen II system on continuous miners in 2013.

In early 2014, it was decided to test the Matrix/JOY Smartzone system at Wildcat Hills Mine. We wanted to test it on battery coal haulers in a mine where the roof support (mesh), coal height (was less) and geologic conditions were different. We were concerned with the issues we had experienced with varying electro-magnetic fields and we felt the system needed to be tested under these conditions. We have not been successful in creating an effective system at this mine.

Due to the issues experienced at Wildcat Hills we decided to conduct a trial on a battery coal hauler at our Francisco Mine in Southeastern Indiana and have experienced some of the same issues.

Now Calvin and Jeremy will provide more detail on our journey.

Chuck Close

Chad and I attended the Public Hearing on Proposed Rule – Part 100, Criteria and Procedures for Assessment of Civil Penalties on February 12, 2015, in Chicago, IL. Ms. Silvey asked to speak with us after that hearing to discuss proximity systems for mobile equipment. Ms. McConnell you were also present at the discussion. I informed Ms. Silvey that the technology had not advanced far enough too effectively and reliably operate on mobile equipment.

The proximity detection systems are dependent on electro-magnetic fields that are impacted by metal roof support materials, power cables and the geologic makeup of the surrounding strata. Some mines have greater challenges than others and with current technology exceptions would have to be made and the fields would have to be reduced enough to not cover the corners of the coal hauler when approaching the continuous miner.

The current technology cannot comply with the statement in the MSHA Fact Sheet “Prevent adverse interference with or from other electrical systems”. The technology is still not ready for production mode and I asked MSHA to delay this rule until it is and work with the vendors to perfect it.

Additional issues with the proposed rule include:

- The rebuild schedule for battery coal haulers is much greater than 3 years which is the basis for the roll out schedule in the proposed rule
- Proposed rule is a disincentive to conduct testing
- Changing batteries on haulers can present special problems
- Miner operator may be forced to operate miner in a more dusty environment (respirable dust)

Peabody has invested a lot of time and resources into this effort and we support continuing research because we see the positive results once the systems are perfected. Peabody continues to support research and wants a solution that works.

Again, thank you for giving us the opportunity to speak.